ELECTRICAL COMMUNICATION INDEX VOLUME 45 (1970)

Subject Index

	Number	Page
Air-Traffic Control, B. Grängsjö	2	92
All-Weather Operations Program for British European Airways, F. Ormonroyd	3	244
Antenna Feeds, Low-Noise Satellite-Communication: Intelsat III, E. J. Perrotti	4	307
Automatic Inter-Toll Trunk Test Equipment, P. Müller and W. Vogt	1	41
Beacon Generator, Local Oscillator and: Intelsat III, H. Goldman	4	349
British European Airways, All-Weather Operations Program for, F. Ormonroyd	3	244
Buitrago Earth Station: Intelsat III, V. San Miguel, D. Hershberg, and H. Struck	4	317
Cables, Communication: An Economic Method of Protection against Overvoltages, E. Widl	2	144
Centralized Charging and the CCR System, M. Deshays and G. J. Le Strat	1	53
Charging, Centralized, and the CCR System, M. Deshays and G. J. Le Strat	1	53
Coder, Telemetry: Intelsat III, H. R. Kuehler	4	343
Command Subsystem, Communication, Telemetry, and: Intelsat III, A. J. Grey	4	330
Communication Cables: An Economic Method of Protection against Overvoltages, E. Widl	2	144
Communication, Telemetry, and Command Subsystem: Intelsat III, A. J. Grey	4	330
Communications:		
Communication, Telemetry, and Command Subsystem: Intelsat III, A. J. Grey	4	330
Influence of Stored-Program Control on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
Integrated Communication System for Speech and Data, U. Piske and H. Willrett	2	116
Lincompex: A Frequency-Controlled Compander System for High-Frequency Radio Telephony, W. M. Davies and W. G. Harris	3	219
Mobile *see* Mobile Communications		
300-Megahertz Radio-Link Equipment, E. M. Ribeiro	1	24
Compander System for High-Frequency Radio Telephony, Lincompex: a Frequency Controlled, W. M. Davies and W. G. Harris	3	219
Computer Applications:		
Direct-Keying System: ITT DKS 6350 Equipment, B. W. Jaffé	1	47
Influence of Stored-Program Control on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
Integrated Communication System for Speech and Data, U. Piske and H. Willrett	2	116
Telephone-Switching Network with Mechanical Latching and Stored-Program Control, J. A. de Miguel	3	186
Contact Phenomena: An ITT Symposium, S. E. Buckley	2	150
Data Transmission:		
Integrated Communication System for Speech and Data, U. Piske and H. Willrett	2	116
Metaconta 10-C Telegraph and Data Switching System, A. Melis and G. Verschueren	2	153
Printing Data Terminal: The New LO 380 System, B. Cramer	3	213
Design and Manufacture, Mobile Radio-Communication Equipment: New Techniques for, W. Kloepfer	1	30
Diplexer, Microwave: Intelsat III, M. Hoffman	4	358
Direct-Keying System: ITT DKS 6350 Equipment, B. W. Jaffé	1	47
Document Sorter, Optical, ODS-1, A. Raes and H. Verhoeven	2	135
Earth Stations, Intelsat III:		
Buitrago Earth Station, V. San Miguel, D. Hershberg, and H. Struck	4	317
Indonesian Earth Station, D. Hershberg	4	325
Editorial: Influence of Stored-Program Control on the Development of Communication Networks, H. H. Adelaar	3	183
Exchange, Herkomat III Herkon-Electronic Private Automatic Branch, W. Hackenberg and K. Wacker	2	124
Fabrication Philosophy and Techniques: Intelsat III, P. Stiehl	4	363
Frequency-Controlled Compander System for High-Frequency Radio Telephony: Lincompex, W. M. Davies and W. G. Harris	3	219
Grade-of-Service Considerations, E. P. G. Wright	1	13
Ground-Control System: Intelsat III, J. E. Drucker	4	291
Helium-Underwater-Speech Translating Equipment, D. A. A. Roworth	1	18
Herkomat III Herkon-Electronic Private Automatic Branch Exchange, W. Hackenberg and K. Wacker	2	124

	Number	Page
Hyperbolic Techniques, Fundamentals of Low- and Very-Low-Frequency: Navigation Systems, J. P. Van Etten	3	192
Indonesian Earth Station: Intelsat III, D. Hershberg	4	325
Influence of Stored-Program Control on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
Integrated Communication System for Speech and Data, U. Piske and H. Willrett	2	116
Intelsat III:		
Flight Communication Equipment:		
Communication, Telemetry, and Command Subsystem, A. J. Grey	4	330
Local Oscillator and Beacon Generator, H. Goldman	4	349
Microwave Diplexer, M. Hoffman	4	358
Telemetry Coder, H. R. Kuehler	4	343
Wide-Band Mixer, Z. Bilyk	4	352
Ground Stations:		
Buitrago Earth Station, V. San Miguel, D. Hershberg, and H. Struck	4	317
Ground-Control System, J. E. Drucker	4	291
Indonesian Earth Station, D. Hershberg	4	325
Low-Noise Satellite-Communication Antenna Feeds, E. J. Perrotti	4	307
Manufacturing Techniques:		
Fabrication Philosophy and Techniques, P. Stiehl	4	363
Quality Assurance, A. O. Gunnesson and G. A. Pritchard	4	376
Reliability, P. G. Atherton	4	370
Philosophy:		
Introduction, H. G. Busignies	4	281
Overall System, W. L. Glomb and L. Feit	4	283
Inter-Toll Trunk Test Equipment, Automatic, P. Müller and W. Vogt	1	41
International Telephone Switching Centers, A. Bini	1	4
Introduction: Intelsat III, H. G. Busignies	4	281
ITT DKS 6350 Equipment: Direct-Keying System, B. W. Jaffé	1	47
Lincompex: A Frequency-Controlled Compander System for High-Frequency Radio Telephony, W. M. Davies and W. G. Harris	3	219
Local Oscillator and Beacon Generator: Intelsat III, H. Goldman	4	349
Loran C System and Product Development, J. P. Van Etten	2	100
Low-Noise Satellite-Communication Antenna Feeds, E. J. Perrotti	4	307
Manufacture and Design, Mobile Radio-Communication Equipment, New Techniques for, W. Kloepfer	1	30
Mechanical Latching and Stored-Program Control, Telephone-Switching Network with, J. A. de Miguel	3	186
Metaconta 10-C Telegraph and Data Switching System, A. Melis and G. Verschueren	2	153
Microwave Diplexer: Intelsat III, M. Hoffman	4	358
Mobile Communications:		
Mobile Radio-Communication Equipment: New Techniques for Design and Manufacture, W. Kloepfer	1	30
Star Mobile Radiotelephone System, J. R. Brinkley and S. R. Pitkin	3	236
Navigation:		
Air-Traffic Control, B. Grängsjö	2	92
All-Weather Operations Program for British European Airways, F. Ormonroyd	3	244
Loran C System and Product Development, J. P. Van Etten	2	100
Navigation Aids: Evolution and Trends, H. G. Busignies	2	88
Navigation Systems: Fundamentals of Low- and Very-Low-Frequency Hyperbolic Techniques, J. P. Van Etten	3	192
Navigation Aids: Evolution and Trends, H. G. Busignies	2	88
Navigation Systems: Fundamentals of Low- and Very-Low-Frequency Hyperbolic Techniques, J. P. Van Etten	3	192
Optical Document Sorter ODS-1, A. Raes and H. Verhoeven	2	135
Overall System: Intelsat III, W. L. Glomb and L. Feit	4	283
Overvoltages, an Economic Method of Protection against: Communication Cables, E. Widl	2	144
Printing Data Terminal: The New LO 380 System, B. Cramer	3	213
Private Automatic Branch Exchange, Herkomat III Herkon-Electronic, W. Hackenberg and K. Wacker	2	124
Protection against Overvoltages, An Economic Method of: Communication Cables, E. Widl	2	144
Push-Button Selection: A Characteristic of Modern Switching Systems, H. Oden	1	66
Quality Assurance: Intelsat III, A. O. Gunneson and G. A. Pritchard	4	376

	Number	Page
Radio-Link Equipment, 300-Megahertz, E. M. Ribeiro	1	24
Radiotelephone System, Star Mobile, J. R. Brinkley and S. R. Pitkin	3	236
Reliability: Intelsat III, P. G. Atherton	4	370
Research Notes: Standard Telecommunication Laboratories at the Annual Physics Exhibition, London, F. Brice	3	258
Satellite *see* Intelsat III		
Service, Grade-of-, Considerations, E. P. G. Wright	1	13
Sorter, Optical Document, ODS-1, A. Raes and H. Verhoeven	2	135
Speech and Data, Integrated Communication System for, U. Piske and H. Willrett	2	116
Speech Translating Equipment, Helium-Underwater-, D. A. A. Roworth	1	18
Star Mobile Radiotelephone System, J. R. Brinkley and S. R. Pitkin	3	236
Stored-Program Control, Influence of, on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
Stored-Program Control, Telephone-Switching Network with Mechanical Latching and, J. A. de Miguel	3	186
Switching:		
Influence of Stored-Program Control on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
International Telephone Switching Centers, A. Bini	1	4
Metaconta 10-C Telegraph and Data Switching System, A. Melis and G. Verschueren	2	153
Push-Button Selection: A Characteristic of Modern Switching Systems, H. Oden	1	66
Telephone-Switching Network with Mechanical Latching and Stored-Program Control, J. A. de Miguel	3	186
Symposium, An ITT, Contact Phenomena, S. E. Buckley	2	150
Telegraph and Data Switching System, Metaconta 10-C, A. Melis and G. Verschueren	2	153
Telemetry Coder: Intelsat III, H. R. Kuehler	4	343
Telemetry, Communication, and Command Subsystem: Intelsat III, A. J. Grey	4	330
Telephone-Switching Network with Mechanical Latching and Stored-Program Control, J. A. de Miguel	3	186
Telephony:		
Automatic Inter-Toll Trunk Test Equipment, P. Müller and W. Vogt	1	41
Centralized Charging and the CCR System, M. Deshays and G. J. Le Strat	1	53
Grade-of-Service Considerations, E. P. G. Wright	1	13
Herkomat III Herkon-Electronic Private Automatic Branch Exchange, W. Hackenberg and K. Wacker	2	124
Influence of Stored-Program Control on the Development of Communication Networks: Editorial, H. H. Adelaar	3	183
Integrated Communication System for Speech and Data, U. Piske and H. Willrett	2	116
International Telephone Switching Centers, A. Bini	1	4
Lincompex: A Frequency-Controlled Compander System for High-Frequency Radio Telephony, W. M. Davies and W. G. Harris	3	219
Metaconta 10-C Telegraph and Data Switching System, A. Melis and G. Verschueren	2	153
Star Mobile Radiotelephone System, J. R. Brinkley and S. R. Pitkin	3	236
Telephone-Switching Network with Mechanical Latching and Stored-Program Control, J. A. de Miguel	3	186
Television Transmitters for 175 to 230 Megahertz, G. Müller and J. Irmer	3	225
Terminal, Printing Data: The New LO 380 System, B. Cramer	3	213
Test Equipment, Automatic Inter-Toll Trunk, P. Müller and W. Vogt	1	41
Traffic:		
• Grade-of-Service Considerations, E. P. G. Wright	1	13
Translating Equipment, Helium-Underwater-Speech, D. A. A. Roworth	1	18
Transmitters, Television, for 175 to 230 Megahertz, G. Müller and J. Irmer	3	225
Trunk Test Equipment, Automatic Inter-Toll, P. Müller and W. Vogt	1	41
Underwater-Speech-Translating Equipment, Helium-, D. A. A. Roworth	1	18
Wide-Band Mixer: Intelsat III, Z. Bilyk	4	352
10-C Telegraph and Data Switching System, Metaconta, A. Melis and G. Verschueren	2	153
300-Megahertz Radio-Link Equipment, E. M. Ribeiro	1	24

ELECTRICAL COMMUNICATION VOLUME 45 (1970)

Author Index

	Number	Page
Adelaar, H. H., Influence of Stored-Program Control on the Development of Communication Networks	3	183
Atherton, P. G., Reliability: Intelsat III	4	370
Bilyk, Z., Wide-Band Mixer: Intelsat III	4	352
Bini, A., International Telephone Switching Centers	1	4
Brice, F., Research Notes: Standard Telecommunication Laboratories at the Annual Physics Exhibition, London	3	258
Brinkley, J. R., Star Mobile Radiotelephone System	3	236
Buckley, S. E., Contact Phenomena: An ITT Symposium	2	150
Busignies, H. G., Introduction: Intelsat III	4	281
Busignies, H. G., Navigation Aids: Evolution and Trends	2	88
Cramer, B., Printing Data Terminal: The New LO 380 System	3	213
Davies, W. M., Lincompex: A Frequency-Controlled Compander System for High-Frequency Radio Telephony	3	219
de Miguel, J. A., Telephone-Switching Network with Mechanical Latching and Stored-Program Control	3	186
Deshays, M., Centralized Charging and the CCR System	1	53
Drucker, J. E., Ground-Control System: Intelsat III	4	291
Feit, L., Overall System: Intelsat III	4	283
Glomb, W. L., Overall System: Intelsat III	4	283
Goldman, H., Local-Oscillator and Beacon Generator: Intelsat III	4	349
Grängsjö, B., Air-Traffic Control	2	92
Grey, A. J., Communication, Telemetry, and Command Subsystem: Intelsat III	4	330
Gunneson, A. O., Quality Assurance: Intelsat III	4	376
Hackenberg, W., Herkomat III Herkon-Electronic Private Automatic Branch Exchange	2	124
Harris, W. G., Lincompex: A Frequency-Controlled Compander System for High-Frequency Radio Telephony	3	219
Hershberg, D., Indonesian Earth Station: Intelsat III	4	325
Hershberg, D., Buitrago Earth Station: Intelsat III	4	317
Hoffman, M., Microwave Diplexer: Intelsat III	4	358
Irmer, J., Television Transmitters for 175 to 230 Megahertz	3	225
Jaffé, B. W., Direct-Keying System: ITT DKS 6350 Equipment	1	47
Kloepfer, W., Mobile Radio-Communication Equipment: New Techniques for Design and Manufacture	1	30
Kuehler, H. R., Telemetry Coder: Intelsat III	4	343
Le Strat, G. J., Centralized Charging and the CCR System	1	53
Melis, A., Metaconta 10-C Telegraph and Data Switching System	2	153
Müller, G., Television Transmitters for 175 to 230 Megahertz	3	225
Müller, P., Automatic Inter-Toll Trunk Test Equipment	1	41
Oden, H., Push-Button Selection: A Characteristic of Modern Switching Systems	1	66
Ormonroyd, F., All-Weather Operations Program for British European Airways	3	244
Perrotti, E. J., Low-Noise Satellite-Communication Antenna Feeds: Intelsat III	4	307
Piske, U., Integrated Communication System for Speech and Data	2	116
Pitkin, S. R., Star Mobile Radiotelephone System	3	236
Pritchard, G. A., Quality Assurance: Intelsat III	4	376
Raes, A., Optical Document Sorter ODS-1	2	135
Ribeiro, E. M., 300-Megahertz Radio-Link Equipment	1	24
Roworth, D. A. A., Helium-Underwater-Speech Translating Equipment	1	18
San Miguel, V., Buitrago Earth Station: Intelsat III	4	317
Stiehl, P., Fabrication Philosophy and Techniques: Intelsat III	4	363
Struck, H., Buitrago Earth Station: Intelsat III	4	317
Van Etten, J. P., Loran C System and Product Development	2	100
Van Etten, J. P., Navigation Systems: Fundamentals of Low- and Very-Low-Frequency Hyperbolic Techniques	3	192
Verhoeven, H., Optical Document Sorter ODS-1	2	135
Verschueren, G., Metaconta 10-C Telegraph and Data Switching System	2	153
Vogt, W., Automatic Inter-Toll Trunk Test Equipment	1	41
Wacker, K., Herkomat III Herkon-Electronic Private Automatic Branch Exchange	2	124
Widl, E., Communication Cables: An Economic Method of Protection against Overvoltages	2	144
Willrett, H., Integrated Communication System for Speech and Data	2	116
Wright, E. P. G., Grade-of-Service Considerations	1	13

XUM

ELECTRICAL COMMUNICATION VOLUME 45 (1970)

Recent Achievements

	Number	Page
Array Antenna	2	168
Athens International Telephone Exchange Cut-over	2	167
Automatic Test Equipment for Diodes on Reels	3	262
AZUR Research Satellite	2	174
Bijouphone Set	1	75
Broadcast Transmitter	3	271
Centralized Traffic Control for Railways	2	170
Closed-Circuit Television for Military Weapon Tests	3	267
Coaxial Relay	3	269
Communications Network for Lloyds Bank, London	3	265
Computer-Based Control System for Reservoir Project	1	78
Cordless Switchboard	3	271
Cordless Telephone Handset	1	78
Cut-over of Two Pentaconta Exchanges	3	269
Data-Display System for Subscriber Register	1	74
DIAL Research Satellite Launched	3	267
Digital Multimeter DX 703 A	2	165
DS. 4 Message Switching System	2	175
Electric Counters	1	82
Envoy Dataprinter	1	79
Envoy Dataprinters Ordered	3	270
Esro 1-B Satellite Launched	1	77
Evanescent-Mode Filter	1	75
Export Order for Envoy Dataprinter	2	171
Flight Simulator for the "Transall"	2	171
Frequency Divider SAJ 110	2	170
HERKOMAT III Private Automatic Branch Exchange	2	173
High-Power Transmitters for Oil Tankers	2	171
Inauguration of New Plant at Longuenesse	3	269
Indonesia Inaugurates Satellite Earth Station	1	77
Induction-Controlled Cranes at Paper Mill	3	268
Intercommunication for Air-Traffic Control	1	78
International Airline Reservation System	1	74
ITT Enters Submarine Cable Business in United States	3	270
Laser Rangefinder	2	173
Lightweight Coaxial Cable for TAT 5	1	81
Logic-Function Analyzer TX 905 A	2	166
Logic Integrated-Circuit Tester	3	270
Lyons-Lacassagne Telephone Exchange	3	263
Magnetic-Tape Unit for GH-210 System	2	165
Magnetron MG 86 T 1	3	267
Mallard Contract for Electronic Exchanges	3	269
Measuring Gauge for OCR-A 1 Characters	3	263
Message-Switching Telegraph Network	3	271
Metaconta 10-C Electronic Switching System for Australia	1	79
Metaconta 10-C System	3	265
Microwave Radio System Inaugurated in Thailand	1	80
Microwave Radio System RL6 B	1	80
Minimat 60 PABX	2	168
Mobile Color-Television Vans for Switzerland	2	169
Mobile Radio for Police	2	171
Monitor for Color Television	1	76
Multiplier Phototube	2	166
New Orders for Model 444 Teleprinter	2	174
New Premises for LCT at Velizy-Villacoublay	3	264
New Version of Star Mobile Radiotelephone	2	173
Optical Document Sorter ODS-1	3	262
PCM Telecommunication Network for the French Army	1	75
Pentaconta A-1 Switching System for Las Vegas	3	263
Pentaconta Installations for Peru and Thailand	3	269
Pentaconta System Introduced in Lebanon	1	82
Pentaconta Telephone Installation	2	168
Plant Inaugurated in Belgium	1	82
Postage Stamp Commemorates Pulse Code Modulation	1	78

	Number	Page
Postal Mechanization Equipment	2	170
Power Supply for International Multiplex Equipment	2	172
Precision Modules for Distance-Measuring Equipment	1	74
Push-Button Crossbar PABX Installed	3	262
Quadradar	1	82
Radar Target Identification	2	169
Radiometer for Mapping Mineral Deposits	3	270
Radiotelephone SEM 56	2	169
Relay Buoy Passes Sea Trials	2	172
Remote Control Network for the Groningue Gas Pipeline	2	175
Satellite Navigation Systems	3	268
Second-Generation Television Transmitters for Band III	2	169
See-in-the-Dark Television Camera	2	165
Star Mobile Radio Equipment Ordered	3	262
Submarine Cable Systems for Spain	2	175
Submarine Cables Connecting Spain to USA and Italy Opened to Traffic	3	263
Supervisory System SDS-20	2	174
Sync Pulse Generator	1	80
Telecommunications Link to Kuwait Satellite Earth Station	1	80
Telephone-Call Generator	1	81
Telephone Capsules Ordered	3	266
Telephone Switching Equipment	2	174
Three-Channel Open-Wire System	2	172
Transit Center at Clermont-Ferrand	3	270
Underground Heating Cables for Sports Pitches	1	76
Windowless Multiplier	2	172
Zero-Force Connector for Printed-Circuit Boards	3	265

XUM